



results of BLAST

BLASTP 2.2.9 [May-01-2004]

Reference:

Altschul, Stephen F., Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", Nucleic Acids Res. 25:3389-3402.

RID: 1085452435-15497-118616244323.BLASTQ3

Query=

(16 letters)

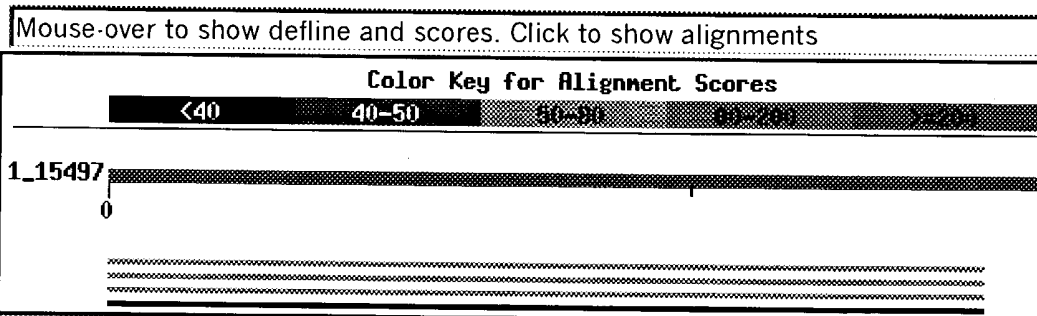
Database: All non-redundant GenBank CDS

translations+PDB+SwissProt+PIR+PRF excluding environmental samples
1,837,236 sequences; 608,447,635 total letters

If you have any problems or questions with the results of this search please refer to the [BLAST FAQs](#)

[Taxonomy reports](#)

Distribution of 653 Blast Hits on the Query Sequence























Sequences producing significant alignments:

#77

Score E
(bits) Value

| | | | |
|--|----|-------|--|
| gi 601931 gb AAA57153.1 neurofilament-H | 51 | 3e-06 | |
| gi 226213 prf 1501343A neurofilament protein NF-H C term | 51 | 3e-06 | |
| gi 33302611 sp P12036 NFH_HUMAN Neurofilament triplet H pro... | 51 | 3e-06 | |
| gi 27529742 dbj BAA74868.2 KIAA0845 protein [Homo sapiens] | 51 | 3e-06 | |
| gi 284668 pir B43427 neurofilament protein H form H2 (repe... | 51 | 3e-06 | |
| gi 284667 pir A43427 neurofilament triplet H1 protein - ra... | 51 | 3e-06 | |
| gi 14250426 gb AAH08648.1 Unknown (protein for IMAGE:38662... | 51 | 3e-06 | |
| gi 108359 pir S02571 neurofilament triplet protein H - pig... | 51 | 3e-06 | |
| gi 24020878 gb AAN40837.1 heavy neurofilament protein [Can... | 51 | 3e-06 | |

| | | | | |
|---------------------------------|--|----|-------|---|
| gi 71549 pir QFHUH | neurofilament triplet H protein - human... | 51 | 3e-06 |  |
| gi 32483416 ref NP_066554.2 | neurofilament, heavy polypepti... | 51 | 3e-06 |  |
| gi 29789026 ref NP_036739.1 | neurofilament, heavy polypepti... | 47 | 3e-05 |  |
| gi 21429606 gb AAM49796.1 | heavy neurofilament NF-H [Rattus... | 47 | 3e-05 |  |
| gi 205686 gb AAA41695.1 | heavy neurofilament subunit | 47 | 3e-05 |  |
| gi 205680 gb AAA41692.1 | high molecular weight neurofilament | 47 | 3e-05 |  |
| gi 92538 pir S02003 | neurofilament triplet H protein - rat ... | 44 | 3e-04 |  |
| gi 46275814 ref NP_035034.1 | neurofilament, heavy polypepti... | 44 | 3e-04 |  |
| gi 128127 sp P19246 NFH_MOUSE | Neurofilament triplet H prote... | 44 | 3e-04 |  |
| gi 28972433 dbj BAC65670.1 | mKIAA0845 protein [Mus musculus] | 44 | 3e-04 |  |
| gi 462702 sp P16884 NFH_RAT | Neurofilament triplet H protein... | 44 | 3e-04 |  |
| gi 463250 emb CAA83229.1 | Neurofilament protein, high molec... | 44 | 3e-04 |  |
| gi 7428714 pir QFPGM | neurofilament triplet M protein - pig... | 35 | 0.23 | |
| gi 33468430 emb CAD70271.1 | Secp1 protein precursor [Tricho... | 32 | 1.0 | |
| gi 39586313 emb CAE66724.1 | Hypothetical protein CBG12070 [... | 32 | 1.8 | |
| gi 13629976 sp O77788 NFM_BOVIN | Neurofilament triplet M pro... | 32 | 1.8 |  |
| gi 1160355 gb AAB00542.1 | UNC-89 | 31 | 3.3 | |
| gi 7511618 pir T29757 | protein UNC-89 - Caenorhabditis elegans | 31 | 3.3 | |
| gi 31209313 ref XP_313623.1 | ENSANGP00000013035 [Anopheles ... | 31 | 3.3 | |
| gi 31746683 gb AAP68958.1 | Uncoordinated protein 89, isoform... | 31 | 3.3 | |
| gi 25141314 ref NP_491290.2 | UNCordinated locomotion UNC-8... | 31 | 3.3 |  |
| gi 2135810 pir I53671 | neurofilament heavy subunit - human ... | 30 | 4.4 |  |
| gi 39589705 emb CAE66940.1 | Hypothetical protein CBG12332 [... | 29 | 8.0 | |
| gi 42521813 ref NP_967193.1 | TonB-like protein [Bdellovibri... | 29 | 8.0 | |
| gi 19075023 ref NP_586624.1 | similarity to GLYPICAN-4 (HEPA... | 29 | 14 | |
| gi 14549637 gb AAK66966.1 | histone H1 [Bufo bufo gargarizans] | 29 | 14 | |
| gi 4885513 ref NP_005373.1 | neurofilament 3 (150kDa medium)... | 28 | 19 |  |
| gi 6003540 gb AAF00492.1 | neurofilament-3 (150 kD medium) [... | 28 | 19 | |
| gi 42523806 ref NP_969186.1 | conserved hypothetical protein... | 28 | 19 | |
| gi 423935 pir A46194 | neurofilament protein NF-220, high-mo... | 28 | 19 | |
| gi 45682130 ref ZP_00193566.1 | COG1250: 3-hydroxyacyl-CoA d... | 28 | 19 | |
| gi 30466260 ref NP_848668.1 | breast cancer 1, early onset [... | 27 | 35 |  |
| gi 20808711 ref NP_623882.1 | Sugar-binding periplasmic prot... | 27 | 35 | |
| gi 47530684 ref YP_022033.1 | conserved hypothetical protein... | 27 | 35 | |
| gi 30023179 ref NP_834810.1 | hypothetical protein [Bacillus... | 27 | 35 | |
| gi 13195201 gb AAK15600.1 | BRCA1 [Bos taurus] | 27 | 35 | |
| gi 21225819 ref NP_631598.1 | putative solute binding lipopr... | 27 | 35 | |
| gi 30265170 ref NP_847547.1 | lipoprotein, putative [Bacillu... | 27 | 35 | |
| gi 121922 sp P06893 H1B_XENLA | HISTONE H1B >gi 2118972 pir ... | 27 | 35 | |
| gi 70670 pir HSXL1B | histone H1B - African clawed frog | 27 | 35 | |
| gi 13235457 emb CAC33750.1 | Guanosine-3,5-bis(diphosphate) ... | 27 | 46 | |
| gi 7160454 emb CAB71173.2 | calpastatin [Xenopus laevis] | 27 | 46 |  |
| gi 13235476 emb CAC33635.1 | Guanosine-3,5-bis(diphosphate) ... | 27 | 46 | |
| gi 42453561 ref ZP_00153468.1 | hypothetical protein Rick041... | 27 | 46 | |
| gi 34580646 ref ZP_00142126.1 | hypothetical (p)ppGpp 3-pyro... | 27 | 46 | |
| gi 15892349 ref NP_360063.1 | similarity to (p)ppGpp 3-pyrop... | 27 | 46 | |
| gi 39595873 emb CAE67376.1 | Hypothetical protein CBG12854 [... | 27 | 46 | |
| gi 14599407 emb CAC43460.1 | probable major surface glycopro... | 27 | 46 | |
| gi 47228946 emb CAG09461.1 | unnamed protein product [Tetrao... | 27 | 46 | |
| gi 7160452 emb CAB62094.2 | calpastatin, putative [Xenopus l... | 27 | 46 |  |
| gi 42526504 ref NP_971602.1 | lipoprotein, putative [Trepone... | 27 | 46 | |
| gi 38085027 ref XP_112637.4 | similar to KIAA0819 protein [M... | 27 | 62 |  |
| gi 8163668 gb AAF73792.1 | surface protein PspC [Streptococc... | 27 | 62 | |

| | | | |
|---------------------------------|--------------------------------------|----|-----|
| gi 8163642 gb AAF73778.1 | surface protein PspC [Streptococc... | 27 | 62 |
| gi 6469853 gb AAF13459.1 | unknown [Streptococcus pneumoniae] | 27 | 62 |
| gi 8163676 gb AAF73796.1 | surface protein PspC [Streptococc... | 27 | 62 |
| gi 8163720 gb AAF73822.1 | surface protein PspC [Streptococc... | 27 | 62 |
| gi 8163657 gb AAF73786.1 | surface protein PspC [Streptococc... | 27 | 62 |
| gi 2981173 gb AAC06245.1 | neurofilament medium subunit [Ser... | 27 | 62 |
| gi 8163695 gb AAF73807.1 | surface protein PspC [Streptococc... | 27 | 62 |
| gi 121918 sp P06892 H1A_XENLA | HISTONE H1A >gi 64775 emb CAA... | 27 | 62 |
| gi 2511705 emb CAA71783.1 | sigA binding protein [Streptococ... | 27 | 62 |
| gi 38085577 ref XP_359324.1 | similar to KIAA0819 protein [M... | 27 | 62 |
| gi 8163701 gb AAF73810.1 | surface protein PspC [Streptococc... | 27 | 62 |
| gi 46433713 gb EAK93144.1 | hypothetical protein CaO19.6126 ... | 27 | 62 |
| gi 8163680 gb AAF73798.1 | surface protein PspC [Streptococc... | 27 | 62 |
| gi 21398433 ref NP_654418.1 | hypothetical protein predicted... | 27 | 62 |
| gi 15901997 ref NP_346601.1 | choline binding protein A [Str... | 27 | 62 |
| gi 128146 sp P16053 NFM_CHICK | Neurofilament triplet M prote... | 27 | 62 |
| gi 70669 pir HSXL1A | histone H1A - African clawed frog | 27 | 62 |
| gi 14718664 gb AAK72978.1 | choline-binding protein A CbpA [... | 27 | 62 |
| gi 14718658 gb AAK72975.1 | choline-binding protein A CbpA [... | 27 | 62 |
| gi 63686 emb CAA29073.1 | NF-M c-terminus [Gallus gallus] | 27 | 62 |
| gi 729671 sp P40280 H2A_MAIZE | Histone H2A >gi 7439704 pir ... | 26 | 84 |
| gi 31232261 ref XP_318672.1 | ENSANGP00000010373 [Anopheles ... | 26 | 84 |
| gi 10720231 sp O80333 POR_MARPA | Protochlorophyllide reducta... | 26 | 84 |
| gi 45914575 ref ZP_0G196729.1 | COG3422: Uncharacterized con... | 26 | 84 |
| gi 15239648 ref NP_200257.1 | wound-responsive protein-relat... | 26 | 84 |
| gi 23027642 ref ZP_00066080.1 | COG2207: AraC-type DNA-bindi... | 26 | 84 |
| gi 46188546 ref ZP_00124737.2 | hypothetical protein Psyr021... | 26 | 84 |
| gi 39597796 emb CAE68488.1 | Hypothetical protein CBG14291 [... | 26 | 84 |
| gi 5834783 emb CAB55338.1 | hypothetical protein [Yarrowia l... | 26 | 84 |
| gi 19074182 ref NP_584788.1 | hypothetical protein [Encephal... | 26 | 112 |
| gi 10437669 dbj BAB15083.1 | unnamed protein product [Homo s... | 26 | 112 |
| gi 34870062 ref XP_221810.2 | similar to CD209 antigen; dend... | 26 | 112 |
| gi 12858661 dbj BAB31400.1 | unnamed protein product [Mus mu... | 26 | 112 |
| gi 13384730 ref NP_079640.1 | RIKEN cDNA 1110005A23 [Mus mus... | 26 | 112 |
| gi 47198672 emb CAF93883.1 | unnamed protein product [Tetrao... | 26 | 112 |
| gi 33667044 ref NP_056244.2 | tarsh protein [Homo sapiens] >... | 26 | 112 |
| gi 45199188 ref NP_986217.1 | AFR669Wp [Eremothecium gossypi... | 26 | 112 |
| gi 21357739 ref NP_651601.1 | CG5520-PA [Drosophila melanoga... | 26 | 112 |

Alignments

Get selected sequences

Select all

Deselect all

☒ >gi|601931|gb|AAA57153.1| neurofilament-H
Length = 511

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 348 AKSPVKEEAKSPEKAK 363

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 328 AKSPVKEEAKSPEKAK 343

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 308 AKSPVKEEAKSPEKAK 323

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 294 AKSPVKEEAKSPEKAK 309

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 274 AKSPVKEEAKSPEKAK 289

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 260 AKSPVKEEAKSPEKAK 275

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 240 AKSPVKEEAKSPEKAK 255

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16

AKSPVKEEAKSPEKAK

Sbjct: 226 AKSPVKEEAKSPEKAK 241

Score = 50.7 bits (112), Expect = 3e-06
Identities = 16/16 (100%), Positives = 16/16 (100%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSPVKEEAKSPEKAK
Sbjct: 128 AKSPVKEEAKSPEKAK 143

Score = 45.2 bits (99), Expect = 2e-04
Identities = 14/14 (100%), Positives = 14/14 (100%)

Query: 1 AKSPVKEEAKSPEK 14
AKSPVKEEAKSPEK
Sbjct: 362 AKSPVKEEAKSPEK 375

Score = 45.2 bits (99), Expect = 2e-04
Identities = 15/16 (93%), Positives = 15/16 (93%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSP KEEAKSPEKAK
Sbjct: 194 AKSPEKEEAKSPEKAK 209

Score = 45.2 bits (99), Expect = 2e-04
Identities = 15/16 (93%), Positives = 15/16 (93%)

Query: 1 AKSPVKEEAKSPEKAK 16
AKSP KEEAKSPEKAK
Sbjct: 180 AKSPEKEEAKSPEKAK 195

Score = 44.3 bits (97), Expect = 3e-04
Identities = 16/22 (72%), Positives = 16/22 (72%), Gaps = 6/22 (27%)

Query: 1 AKSPVKE-----EAKSPEKAK 16
AKSPVKE EAKSPEKAK
Sbjct: 160 AKSPVKEEAKSPAEEKSPEKAK 181

Score = 41.8 bits (91), Expect = 0.002
Identities = 14/16 (87%), Positives = 15/16 (93%)